Remarks

The Office Action has been reviewed with care and certain amendments made to claims 1, 20 and 39 which are believed to place this application in condition for allowance. Applicant appreciates the attention of the Examiner to this patent application

Claims 1-11, 18, 39, 45-50, 54 and 55 were rejected under 35 USC 102(b) as being anticipated by Stang et al.'s "Plant Growth Regulators Alter Fruit Set and Yield in Cranberry (*Vaccinium Macrocarpon Ait.*)", Acta Horticulturae 241, 1989, pp. 277-283. Claims 12-17, 19-38, 40-44 and 51-53 were rejected under 35 USC 103(a) as being obvious over Stang et al.

102 rejection of Claims 1-11, 18, 39, 45-50, 54 and 55

Previously presented claims 1-19 and 55 claimed a method comprising application of a growth regulating composition such that most of the cranberries have a mature mass of less than about 0.6 grams. Previously presented claims 39-54 claimed a yield of miniature cranberries from a cranberry plant wherein most of the cranberries have mature masses of less than about 0.6 grams. Each of these claims sets has been amended to require that most of the cranberries have mature masses of less than 0.6 grams.

In rejecting these claims, the November 3, 2003 Office Action references Table 1 of Stang et al. and asserts:

> Stang et al. do state that the mean fruit weight of the cranberries is 0.47g for GA_3 and 0.53g for GA_{4+7}. If a distribution is normal, we know the percentiles of the data; given a normal distribution, 68% of the data will fall between +/- one standard deviation from the mean. This would appear to indicate, statistically, most (68%) of the cranberries having a weight less than about 0.6g, since both mean fruit weights are below the claimed less than about 0.6g.

Inexplicably, in utilizing a theoretical distribution the Office Action ignores the actual data presented in Table 1 which shows that, for treatment with GA_3, 27 cranberries were between 0.6-1.0 grams, 9 cranberries were below that range and 2 cranberries were above that range. Regardless of the Office Action's definition of a normal distribution, the data presented in Stang et al. clearly shows that a vast majority (76% (29/38)) of the cranberries treated with GA_3 were not less than 0.6g. Likewise, the data in Table 1 shows that 82.5% (33/40) of

cranberries treated with GA_{4+7} were not less than 0.6g (28 cranberries between 0.6-1.0 grams, 7 cranberries below that range and 5 cranberries above that range). A simple explanation for the low mean cranberry weights despite the fact that the vast majority of cranberries had masses over 0.6g is that the smaller cranberries were extremely small and had weights which decreased the mean weight markedly.

Therefore, Applicant again contends that Stang et al. fails to disclose, either expressly or inherently, each and every limitation of claims 1-11, 18, 39, 45-50, 54 and 55 and that the rejection under 35 USC 102(b) is improper.

103 rejection of Claims 12-17, 19-38, 40-44 and 51-53

Previously presented claims 20-38 claimed a method of increasing fruit set on cranberry plants comprising commercially applying to the cranberry plants a plant-growth-regulating composition in an amount and at a time such that the plants have a fruit set of at least about 80%.

The Office Action rejected claims 20-38 as being obvious in view of Stang et al. The rejection contends that it would be obvious to one of ordinary skill in the art to further experiment in view of Stang et al. in order to find the specific claimed ranges. Declarations from Jonathan D. Smith, Ph.D. and Donald Wandler which support the nonobviousness and patentability of claims 20-38 were submitted with the response filed August 11, 2003.

In re O'Farrell, 7 USPQ2d 1673 (Fed. Cir. 1988), established that the formula for obviousness is "obvious to try with a reasonable expectation of success." As stated in the Smith declaration, experts "failed to or simply did not believe that it would be possible to reach such levels of fruit set," i.e., there was no reasonable expectation of success in achieving fruit sets of at least about 80%.

Furthermore, the cited prior art does not teach "how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued." *In re Eli Lilly & Co.*, 14 USPQ2d 1741 (Fed. Cir. 1990). "In the absence of such guidance, the reference[] might make the claimed invention obvious to try, but [it does] not make it unpatentable under

35 USC 103." USPTO Board of Patent Appeals and Interferences, *Ex parte Majumder*, Appeal No. 2002-0449, Application No. 09/037,409, Paper No. 20.

Claims 12-17, 19, 40-44 and 51-53 all depend from an allowable independent claim and do not require independent support for patentability.

Summary

In summary, the rejections of each of the independent claims is herein traversed by amendment and/or argument. Claim 1 requires a method providing that most of the cranberries have a mature mass of less than 0.6 grams. As stated above, the cited prior art does not provide a majority of cranberries with mature masses of less than 0.6 grams.

Claim 20 requires a method of increasing fruit set such that the plants have a fruit set of at least about 80%. As stated above, the cited prior art does not provide a method achieving a fruit set above 57%. Furthermore, the cited prior art does not provide "a reasonable expectation of success" in achieving a fruit set as high as claimed. In addition, the cited prior art does not teach "how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued." Therefore, under the guidelines followed by the USPTO, the cited reference does not make the claimed invention unpatentable.

Claim 39 requires a yield of miniature cranberries from a cranberry plant wherein most of the cranberries have mature masses of less than 0.6 grams. Again, the cited prior art does not provide a yield of cranberries with a majority having mature masses of less than 0.6 grams nor does it suggest that such a yield could be achieved, how to achieve it, or that it would be achieved if certain directions were pursued.

Applicant believes that all rejections have been traversed by amendment and/or argument and all claims are in proper form for allowance. Early favorable action is earnestly solicited. The Examiner is invited to call the undersigned attorney if that would be helpful in facilitating resolution of any issues which might remain. Please debit Deposit Account 10-0270 for the required extension fee.

Respectfully submitted,

James P. Delaney
Registration No. 45,578

Dated: March 3, 2004
Jansson, Shupe & Munger, Ltd.
245 Main Street
Racine, WI 53403-1034
Atty. Docket No. RBC-101US

CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: MAIL STOP EE Amendment COMMISSIONER FOR PATENTS, ALEXANDRIA, VA 22313-1450 on 3/3/04.
Christine M. Wipper
Name
Christine M. Wipper 3/3/04
Signature Date